

ASSIGNMENT 6

Textbook Assignment: "Chemical and Biological Warfare Defense," chapter 9.

Learning Objective: Recall the function and use of protective equipment designed for CBR defense.

- | | |
|---|---|
| <p>6-1. Biological and chemical substances for military use are primarily antipersonnel agents.</p> <ol style="list-style-type: none">1. True2. False <p>6-2. Detailed information on biological warfare (BW) and chemical warfare (CW) agents can be found in what chapter of the <i>Naval Ships' Technical Manual</i>?</p> <ol style="list-style-type: none">1. 2302. 3223. 4704. 528 <p>6-3. The MCU-2 protective mask is available in how many sizes?</p> <ol style="list-style-type: none">1. 12. 23. 34. 4 | <p>6-4. After the protective mask has been donned and checked for correct fit, you should perform a negative pressure check.</p> <ol style="list-style-type: none">1. True2. False <p>6-5. Before donning a protective mask, you should replace unapproved eyeglasses and contact lenses with authorized combat spectacles.</p> <ol style="list-style-type: none">1. True2. False <p>6-6. To remove the mask from the mask carrier, you should always pull on the outlet valve.</p> <ol style="list-style-type: none">1. True2. False <p>6-7. If inhalation is too forceful while checking for leaks, the facepiece of the protective mask will collapse against the face.</p> <ol style="list-style-type: none">1. True2. False <p>6-8. After doffing a mask, you should clean and dry the mask according to</p> <ol style="list-style-type: none">1. QC regulations2. LCPO instructions3. department SOPs4. current PMS requirements |
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6-9. The MCU-2/P protective mask uses a single filter canister, designated

1. C1
2. C2
3. C3
4. C4

6-10. A C2 canister is labeled a training canister how many days after being removed from packaging?

1. 15
2. 30
3. 45
4. 60

6-11. To provide identification, a stripe of what color is painted around the rim of a C2 training canister?

1. Red
2. Blue
3. Green
4. White

6-12. A C2 canister is good for a total of how many blood agent attacks?

1. 1
2. 2
3. 3
4. 4

6-13. The canteen used with the MCU-2/P protective mask has a M1 cap that allows the wearer to replenish fluids while wearing the mask.

1. True
2. False

6-14. The function of the chemical protective overgarment (CPO) is to protect the wearer from chemical agents in liquid form and from their associated vapor.

1. True
2. False

6-15. The CPO has a wear time in a contaminated environment of a total of how many hours?

1. 8
2. 7
3. 6
4. 4

6-16. The chemical protective ensemble (CPE) consists of the CPO, a protective mask, and a pair of boots and gloves.

1. True
2. False

Learning Objective: Describe the effects of the different forms of CW agents.

6-17. Chemical agents are primarily designed to produce which of the following effects?

1. Accelerate the spread of diseases
2. Oxidation of materials
3. Corrosion of metals
4. Disorganization of the functions of the human body

**IN ANSWERING QUESTIONS 6-18
THROUGH 6-24, REFER TO FIGURE 6A.**

- | |
|-------------------|
| A. Nerve agent |
| B. Blister agent |
| C. Blood agent |
| D. Choking agent |
| E. Vomiting agent |
| F. Tear agent |

Figure 6A

6-18. Which agent works by disturbing the chemical processes of the nervous system and stopping bodily functions?

1. A
2. C
3. D
4. E

6-19. Which agent affects the eyes and upper respiratory tract?

1. B
2. C
3. E
4. F

6-20. Which agent can enter the body through any exposed skin?

1. A
2. C
3. E
4. F

6-21. Which agent is dispersed as an aerosol and produces effects when it is inhaled?

1. A
2. C
3. E
4. F

6-22. The effects of the distilled mustard form of this agent do not usually appear until 4 to 6 hours after exposure.

1. A
2. B
3. C
4. D

6-23. Hydrogen cyanide (AC) is an example of which agent?

1. A
2. C
3. E
4. F

6-24. The use of which agent is limited because it reacts rapidly to water to yield nontoxic hydrolysis products?

1. A
2. B
3. D
4. F

6-25. To prevent serious injury, you must begin decontamination of blister agents within how many minutes after exposure?

1. Between 1 and 2
2. Between 3 and 4
3. Between 5 and 6
4. Between 7 and 8

6-26. Of the following chemical agents, which one is NOT a nerve agent?

1. Tabun (GA)
2. Sarin (GB)
3. Phosgene (CG)
4. Soman (GD)

6-27. When inhaled, the liquid droplets of V agents are how many times as toxic as the older G series nerve agents?

1. Ten
2. Two
3. Three
4. Five

6-28. During winter months, the HD blister agent may produce casualties for what maximum length of time after application?

1. 45 minutes
2. 12 hours
3. 10 days
4. Several weeks

6-29. Incapacitating agents are not predictable and may change from dose to dose and person to person.

1. True
2. False

6-30. Which of the following symbols identifies an incapacitating agent that is a slow-acting aerosol?

1. AC
2. BZ
3. DM
4. CG

Learning Objective: Recall the function and use of equipment and materials used to detect chemical warfare (CW) agents.

6-31. M-8 detector paper is used to detect V, G, and H agents that are in what form?

1. Gas
2. Vapor
3. Liquid
4. Aerosol

6-32. Response time for the M-8 detector paper is approximately how many seconds?

1. 10
2. 12
3. 15
4. 20

6-33. The M-9 chemical detector paper is issued by the roll. The roll is 30 feet long and how many inches wide?

1. 1
2. 2
3. 3
4. 4

IN ANSWERING QUESTIONS 6-34 THROUGH 6-39, REFER TO THE CW DETECTORS IN FIGURE 6B.

- | |
|------------------|
| A. M8 |
| B. M9 |
| C. M256A1 |
| D. M18A2 |
| E. CWDD AN/KAS-1 |
| F. CAPDS |

Figure 6B

6-34. Which detectors use sensitized paper to check for nerve agents G and V and blister agents H and L?

1. A and B
2. C and D
3. E and F
4. D and F

6-35. Which detector uses sensitized paper that turns red when any chemical agent is detected?

1. F
2. E
3. B
4. C

6-36. Which detector includes a kit that has 12 sampler detectors that are used to check for CW agents in the liquid form?

1. F
2. E
3. D
4. C

6-37. Which detector is a passive infrared imaging sensor designed for use on ships?

1. A
2. B
3. C
4. E

6-38. Which detector is a local sampling detection device that has an ionization and detection system that draws air samples into a heater block?

1. E
2. F
3. D
4. C

6-39. Which detector is used for automatic continuous sampling of the outside air and warns of CW agents by activating the ship's alarm system?

1. C
2. D
3. E
4. F

- 6-40. Most chemical agent detection devices indicate the presence of chemical agents by
1. the production of orange smoke
 2. dissolving in the chemical
 3. emitting shrill sounds
 4. color changes that are chemically produced.
- 6-41. M-8 chemical detector paper is issued in a book containing a total of how many split sheets?
1. 10
 2. 25
 3. 35
 4. 40
- 6-42. When conducting maintenance on the AN/KAS-1 CWDD, you should always refer to the manufacturer's technical manual and the PMS system.
1. True
 2. False
- 6-43. Contamination marking kits contain markers for identifying contaminated areas. What color markers are used for chemical and biological areas?
1. Yellow for chemical and blue for biological
 2. Green for chemical and brown for biological
 3. Purple for chemical and black for biological
 4. Red for chemical and orange for biological

Learning Objective: Recall the requirements for biological warfare (BW) defense.

- 6-44. BW operations are the use of living agents to cause the spread of disease and possible death among humans.
1. True
 2. False
- 6-45. Which of the following is a powerful toxin produced by bacteria?
1. Pneumonia
 2. Typhoid fever
 3. Diphtheria
 4. Smallpox
- 6-46. Many viruses are so small that they can only be seen through an electron microscope.
1. True
 2. False
- 6-47. Disease vectors are animal carriers that transfer infective agents from one host to another.
1. True
 2. False
- 6-48. Disease vectors are divided into how many classifications?
1. 5
 2. 2
 3. 3
 4. 4

**IN ANSWERING QUESTIONS 6-49
THROUGH 6-54, REFER TO FIGURE 6C.**

- | |
|---|
| <p>A. Bacteria</p> <p>B. Rickettsiae</p> <p>C. Viruses</p> <p>D. Fungi</p> <p>E. Protozoa</p> |
|---|

Figure 6C

6-49. Which of the microorganisms are small single-cell organisms?

1. A
2. B
3. C
4. D

6-50. Which of the microorganisms grow only within living cells?

1. A and D
2. D and E
3. B and C
4. C and D

6-51. Which of the microorganisms cause the diseases typhoid fever, meningitis, and tuberculosis?

1. D
2. C
3. B
4. A

6-52. Which of the microorganisms cause Rocky Mountain spotted fever and typhus?

1. A
2. B
3. C
4. E

6-53. Which of the microorganisms cause amoebic dysentery and malaria?

1. B
2. C
3. D
4. E

6-54. Which of the microorganisms is best known for its ability to spoil food and fabrics?

1. B
2. C
3. D
4. E

6-55. What classification of disease vectors transmits organisms from one host to another?

1. Active
2. Passive
3. Biological
4. Mechanical

6-56. Mosquitoes that transmit malaria and yellow fever are what type of vectors?

1. Active
2. Passive
3. Biological
4. Mechanical

6-57. Which of the following members of the animal kingdom is not normally considered a pest?

1. Rat
2. Horse
3. Starling
4. Groundhog

6-58. The presence of a large number of parasites on the surface of an animal's body is known as

1. a canker
2. a tangle
3. a gaggle
4. an infestation

6-59. Ticks and mites are examples of what military biology refer to as

1. microbes
2. protozoa
3. vectors
4. host

6-60. Microorganisms are divided into a total of how many distinct classifications?

1. Eight
2. Seven
3. Six
4. Five

6-61. Microorganisms capable of producing a disease are known as

1. pathogens
2. vectors
3. pests
4. halogens

6-62. What microorganism causes influenza?

1. Rickettsiae
2. Protozoa
3. Fungi
4. Virus

6-63. The effects of pathogens are always delayed and this period can vary from hours to weeks.

1. True
2. False

Learning Objective: Recall CW and BW countermeasures employed when a ship is at sea to include closure, washdown, and weathering.

6-64. Which of the following actions is NOT a ship protective action taken when at sea?

1. Weathering
2. Closure
3. Heat release
4. Washdown

6-65. The closure system is designed to protect the interior of the ship from the entry of

1. rain
2. vectors
3. gases
4. microbes

6-66. What system is a dry pipe sprinkler system that provides a moving screen of water over the weather surfaces of the ship?

1. Collective Protection System (CPS)
2. Firemain decon
3. Halon 1301
4. Countermeasures washdown (CMWD)

6-67. Weathering is the gradual reduction of a persistent hazard due to the effects of the environment.

1. True
2. False

6-68. Personnel working in proximity of a decontamination operation should wear protective clothing and mask until what person declares the area safe?

1. Executive officer
2. Damage control officer
3. Officer of the deck
4. Damage control assistant

6-69. What kit is used to decontaminate liquid chemical agents from exposed skin areas by physical removal, absorption, and neutralization?

1. M8
2. M9
3. M291 SDK
4. M16A1

6-70. After a chemical attack, exposed personnel must reenter the ship through what area?

1. Contamination Central Area (CCA)
2. Decontamination Central Area (DCA)
3. Contamination Control Area (CCA)
4. Decontamination Central Control Area (DCCA)

6-71. Multiple decon stations and the availability of both salt and freshwater provide for working around contaminated areas and battle-damaged areas.

1. True
2. False

6-72. What is the optimum size for CCA spaces?

1. 9' by 9'
2. 8' by 7'
3. 7' by 7'
4. 6' by 8'

6-73. The collective protection system (CPS) is a ventilation system that prevents CBR contamination from the interior of the ship.

1. True
2. False

6-74. Maintenance and operation of the CPS should be in compliance with the ship-specific PMS requirements.

1. True
2. False

6-75. There must be an ongoing review of the CBR defense bill because of the rapid technological changes in the CBR countermeasures program.

1. True
2. False